[100 Based Stopwatch]

Abstract

Creating this new stopwatch design will allow for the easy addition and subtraction of seconds, minutes and tenths and hundreds, or hours and tenths and hundreds to determine the time differential between sequential events. This will be a major time savings to time and motion studies. Currently, during time observation studies, the observer records time between operations in seconds to one minute, then records time in minutes and seconds to one hour, then records time in hours, minutes and seconds. To get the time differential between operations occurring at time greater than one minute, the observer must manually convert all times to seconds. The operator cannot easily add and subtract the hours, minutes and seconds because time is a traditional 60 base. Creating the 100 base of hours and minutes will provide the means of easy and direct calculation of the time differential between observed operations. Providing the seconds accumulation to 999,999 seconds will allow direct calculation of the time differential. A standard commercially available stopwatch has a display of 6 digits. Four of the digits to the left side of the display are

larger than the two on the right side. For accumulating seconds, all digits will be used without a decimal point. Total seconds available will be 999,999. If this total is exceeded, the time will automatically convert to accumulated minutes and tenths and hundreds of minutes. For accumulating minutes and tenths and hundreds of minutes, minutes will be accumulated to 9999.99. If this total is exceeded, the time will automatically convert to hours and tenths and hundreds. A mode indicator will be expanded to show what count, seconds, minutes, or hours is displayed. Changing the mode will convert the time accumulated to the seconds, minutes, or hours selected. A standard commercially available stopwatch has a display of 6 digits. Four of the digits to the left side of the display are larger than the two on the right side. For accumulating seconds, all digits will be used without a decimal point. Total seconds available will be 999,999. If this total is exceeded, the time will automatically convert to accumulated minutes and tenths and hundreds of minutes. For accumulating minutes and tenths and hundreds of minutes, minutes will be accumulated to 9999.99. If this total is exceeded, the time will automatically convert to hours and tenths and hundreds. A mode indicator will be expanded to show what count, seconds, minutes, or hours is displayed. Changing the mode will convert the time accumulated to the seconds, minutes, or hours selected.